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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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72104	7590	02/22/2008	EXAMINER	
FotoNation IP Dept. 800 Airport Blvd. Suite 522 Burlingame, CA 94010			SETH, MANAV	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/608,810

Applicant(s)

STEINBERG ET AL.

Examiner

Manav Seth

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 35-39, 80-95 and 114-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 35-39, 80-95 and 114-120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/6/07, 1/9/04, 01/07/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Response to Restriction/Election Requirement

1. The response to restriction/election requirement received on December 11, 2007 has been entered in full. Applicant has elected species 1 for examination purposes.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-16, 35, 39, 80-95, 114 and 118-120 are rejected under 35 U.S.C. 102(b) as being anticipated by Ray et al., European Patent No. EP 1,128,316, Publication date. August 29, 2001.

Regarding claims 1, claim 1 recites a method of processing a digital image using a face detection with in said image to achieve one or more desired image processing parameters, comprising the steps of (a) identifying a group of pixels that correspond to an image of a face within the digital image. Clearly this limitation recites detecting a face in the image and as per the technical aspect, if such detection is done within an imaging device, the device cannot straight away or directly point to the face but will analyze the picture elements or pixels in the image to detect and identify

pixels related to the face. Similarly, Ray discloses automatic face detection within an image in a digital image camera (para 0005, 0006, 0025, 0026),

Claim 1 further recites "determining default values of one or more parameters of at least some portion of said digital image; and adjusting of the one or more parameters within the digitally-detected image based upon an analysis of the one or more parameters within the digitally-detected image based upon an analysis of said digital image including said image of said face and said default values". These limitations recite correcting or adjusting the image parameters from the initial or default value to a second or final value based on the image analysis of the image including the detected face. Clearly, it being inherent that correction or adjustment can only be done to the image, if it is known before hand what is wrong with the image or if the quality of the image is known before hand and quality of the image itself is defined by the image parameters. Ray discloses the same in para 0008 (...processing the image data together with the algorithms for determining the presence of one or more faces in the scene and their relation to certain predetermined composition principles.....) and further discloses "the results of face detection are used to control the various function of the camera on the digitally detected image such as red eye correction, focus control, exposure control, color correction, etc." (para 0025, 0026, 0030, 0034), thus adjusting or correcting or improving values of one or more parameters within digitally-detected image based upon an analysis of said face and default or initial values.

Regarding claim 2, Ray discloses the digital image comprising digitally-acquired image (para 0010- digital image acquired in a digital camera).

Regarding claims 3-5, Ray discloses the decision being performed manually or automatically for adjusting or processing values of the one or more parameters based on the face detected (page 5, para. 0030, lines 32-42; para 0031 – automatic focusing or user designated focusing).

Regarding claim 6, Ray discloses the one or more parameters including orientation, color, tone, size, luminance, relative exposure, relative spatial location, tone reproduction, sharpness or focus or combinations thereof (para 0025, paras 0031-0034, 0036-0040).

Regarding claim 7, Ray discloses the one or more parameters comprise of a mask that defines one or more regions where the one or more parameters are valid (figure 6 shows the grid or mask; page 6 - para 0034 – lines 23-29 – discloses the use of grid or mask (second group of aid) in figure 6 in image composition assistance which further defines regions in which the image is pleasing or in other words, in which the one or more parameters are valid; para –35 – topic final image mode - lines 42-46 – the second group of aid desired for final image processing, where final image processing includes optimal color balance, red eye correction, orientation).

Regarding claims 8 and 9, these claims recites the mask further comprising a continuous presentation of varying strength within different sub-regions of said one or more regions and said one or more parameters comprising identical parameters that differ in value based on said mask. As discussed in the rejection of claim 7, grid in figure 6 is used as an aid in image composition which is further used in color balance etc, and as discussed Ray clearly teaches face is located in particular region of grid, and face recites different color than rest of the image portion and Ray provides just

optical color balance in part in the region of detected faces (para 0038), thus same parameter has various different values in different areas of the grid or mask, thus varying strengths).

Regarding claim 10, claim 10 recites at least two parameters being concatenated into a single parameter. As discussed in the rejection of claims 1 and 6, Ray discloses adjusting the parameter related to focus and as per the technical aspects, adjusting focus also inherently adjusts sharpness of the image, thus concatenating two parameters into one).

Claim 11 has been similarly analyzed and rejected as per claims 3 and 4.

Claim 12 has been similarly analyzed and rejected as per claims 1 and 6.

Regarding claim 13, Ray discloses creating an operation list for said digital image based on said values of said one or more parameters (page 5, para 0028, lines 14-16; page 6 - para 0034 – lines 17-19-generate composition suggestions (operation list) that appear in view finder).

Regarding claims 14 and 15, these claims recite the operation list is embedded within said digital image or is external to said digital image (as discussed before, Ray discloses generating an operation list that is displayed or appears in view finder on which the image is also displayed, therefore displaying list on top of the image can also be read as list embedded on the image or just displayed on top of the image thus being external, clearly it being a designer's design choice of doing

so. In para 0027 on page 5- lines3-4 Ray discloses data attached to the image; page 5, para. 0030, lines 39-42).

Regarding claim 16, Ray discloses said adjusting the values of said orientation comprises determining a rotation value of the digital image (para 0040 – Ray in this para discloses “the majority of faces will be upright or close to upright, in the sense of the overall image orientation” which clearly means that in order to properly adjust the values of orientation, the proper orientation (rotation value) of the digital image should be known).

Claims 35 and 39 have been similarly analyzed and rejected as per the subject matter of Ray discussed in claims 1 and 2.

Claims 80 – 95 have been similarly analyzed and rejected as per claims 1-16.

Claims 114 and 118 have been similarly analyzed and rejected as per claims 35 and 39.

Regarding claims 120 and 121, these claims recite automatically providing a fill-flash and providing an option for providing a suggested fill flash (page 6, para 0032, lines 6-8 – providing a flash with condition or option).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 36-38 and 115-117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al., European Patent No. EP 1,128,316, Publication date. August 29, 2001.

Regarding claims 36 and 37, these claims recite the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually removing a false indication of another face within the image, manually adding an indication of at least one other face within the image. Ray as discussed before in the rejections of previous claims discloses detection of one or more faces in the image. Ray in para 0030 on page 5 in lines 35-40 does teach that if the camera or the system is unable to properly detect the face automatically, the face can be selected/detected manually using a cursor in the viewfinder. Ray does not expressly teach manually removing a false face or manually adding another face within the image. But, since Ray's system viewfinder allows manual selection of image objects in the image using a cursor on a viewfinder, it would clearly be obvious or apparent to one of ordinary skill in the art at the time of invention was made to select or deselect the appropriate objects in the images manually using a cursor according to the needs or requirement, and thus manually can verify the correct detection/selection of objects (faces) within the image.

Regarding claim 38, same arguments are applied in rejection of claim 38 as applied to claims 36 and 37.

Claims 115-117 have been similarly analyzed and rejected as per claims 36-37.

Examiner note: Examiner has cited particular columns, paragraphs and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teaching for the art and are applied to the specific limitations within the individual claim, other passages and figures may applied as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potential teaching all or part of the claimed invention, as well as the context of the a passage as taught by the prior art or disclosed by the examiner.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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SUPERVISORY PATENT EXAMINER
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Manav Seth
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February 17, 2008